



FROM TRAINED TO RETAINED:

AN ANALYSIS OF RETENTION OUTCOMES FOR RAP COMPLETERS

COLERIDGE INITIATIVE ARKANSAS TEAM

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RESEARCH QUESTION

What are the Employer retention outcomes for Arkansas
Registered Apprenticeship Program completers?

What, if any, demographic variables are associated with
higher retention rates?



MOTIVATION

Apprenticeship participants are looking for a long, stable career.

Employers are looking for a productive, engaged, high-functioning team.

Arkansas is looking to continuously advance and grow the state workforce.

National interest in retention as a potential outcome measure.

WHAT THE LITERATURE TELLS US

1.

POSITIVE EARNINGS OUTCOMES

Apprenticeship completion is primarily associated with higher earnings than those who did not participate in a RAP.

Leads to increased tax revenue and decreased spending social safety net programs for these participants.

2.

GAPS IN RESEARCH

Retention is an important component of productivity and job satisfaction.

Unfortunately, there is relatively little research focused specifically on RA post-completion retention.

3.

WIOA PERFORMANCE ACCOUNTABILITY

Retention with the Same Employer is one of the three pilot Effectiveness in Serving Employers measures required in WIOA's performance accountability.

Defined as the percentage of participants who exit and are employed with the same employer in the second and fourth quarters after exit.

Measure has helped public workforce systems to improve effectiveness.

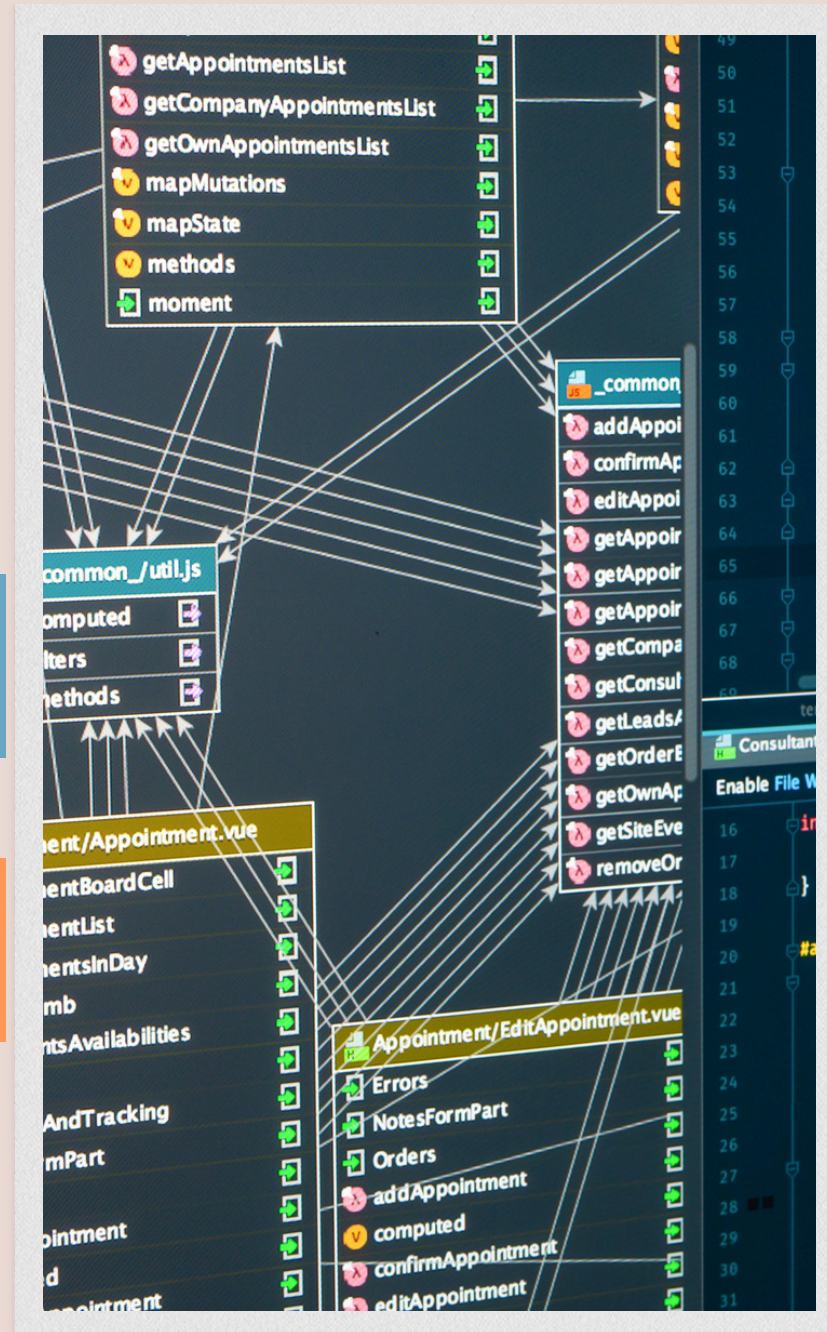
COHORT FOR ANALYSIS

REGISTERED APPRENTICES IN ARKANSAS WHO COMPLETED RAP IN 2014 - 2018

This date range gave us a group of completers with enough time in the future to perform retention analysis and avoid non-traditional outcomes from COVID staffing challenges.



CREATING OUR COHORT



RAPIDS

Registered Apprenticeship completers in Arkansas from 2014-2018

UI WAGES LEHD

Employment data from the end of
Apprenticeship through 3 years after

QCEW

NAICS Industry Sectors and Subsectors

MEASURING RETENTION

01

Starting point was the quarter the Apprenticeship was completed

04

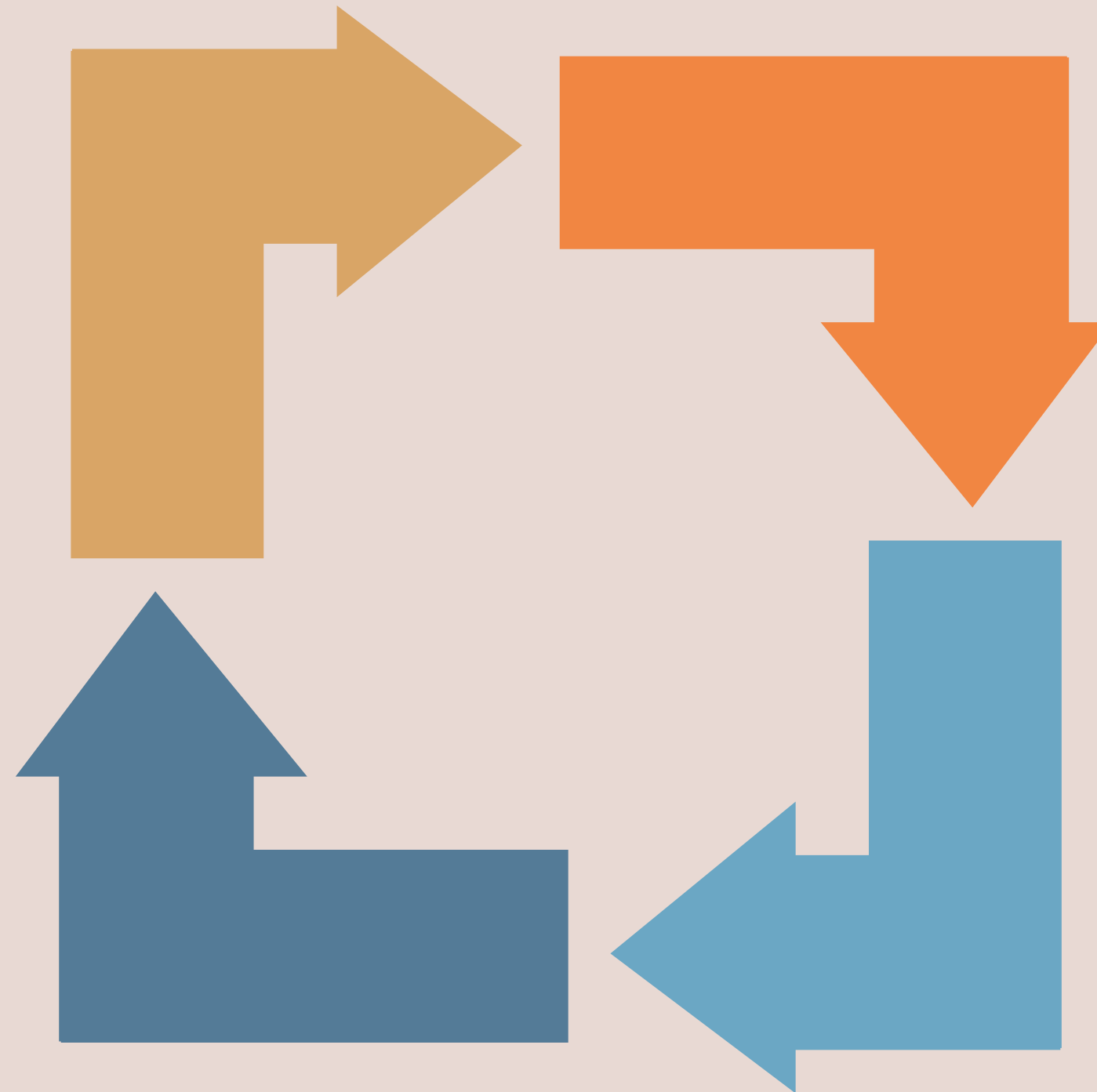
Assumptions: Employer at the end of RAP was their employer during RAP. If 2 employers, Primary Employer was higher wage

02

Calculated the number of quarters the Employee stayed with the same employer immediately post apprenticeship

03

Max length of time was 3 years or 12 quarters



DATA CHALLENGES



SMALL SAMPLE SIZES

Subgroup analysis eliminated certain groups based on small sample sizes



MISSING DATA

Employers with more than one location did not have NAICS data, eliminating ability to look at industry level retention.

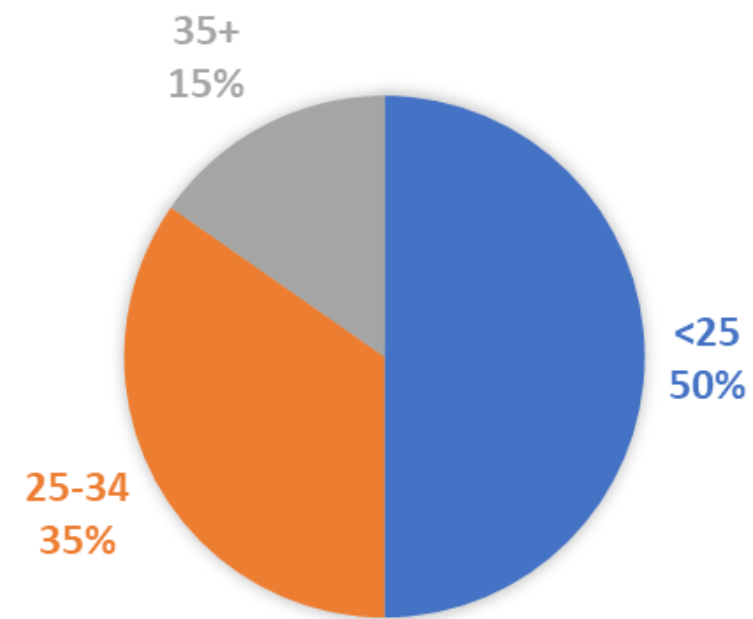


DATA RESTRUCTURING

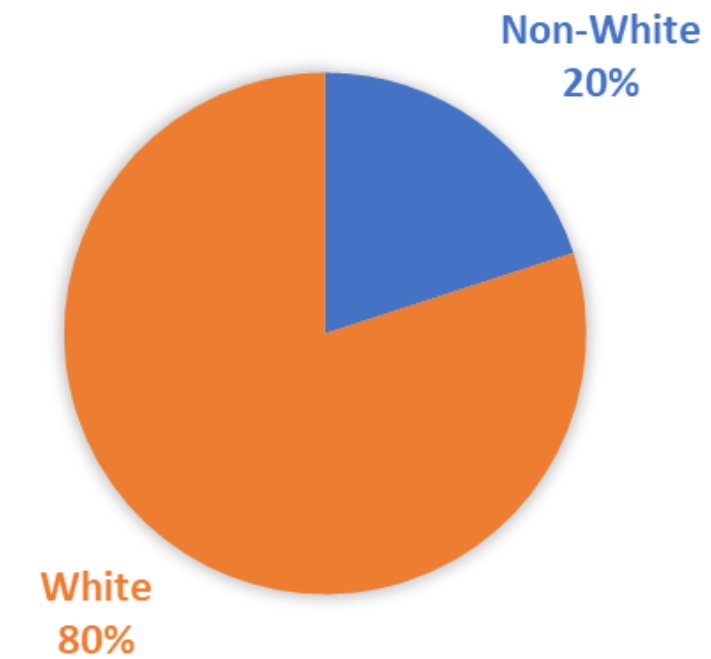
Reworked and restructured data in a format that was usable for our analysis.

WHAT DOES OUR COHORT LOOK LIKE?

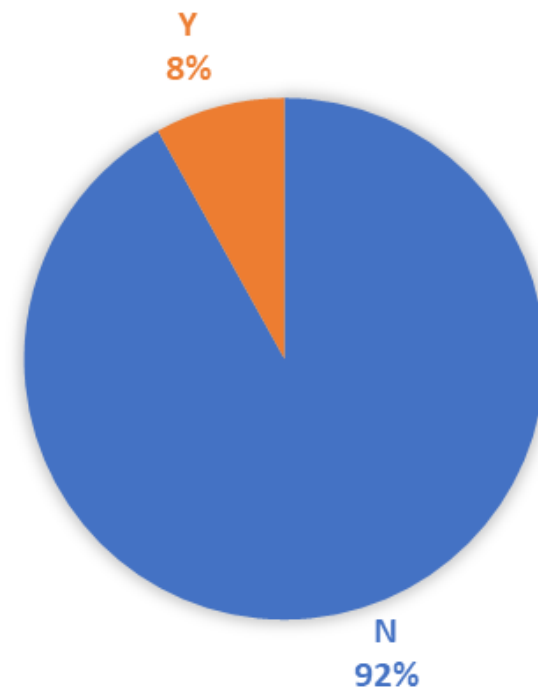
AGE GROUP



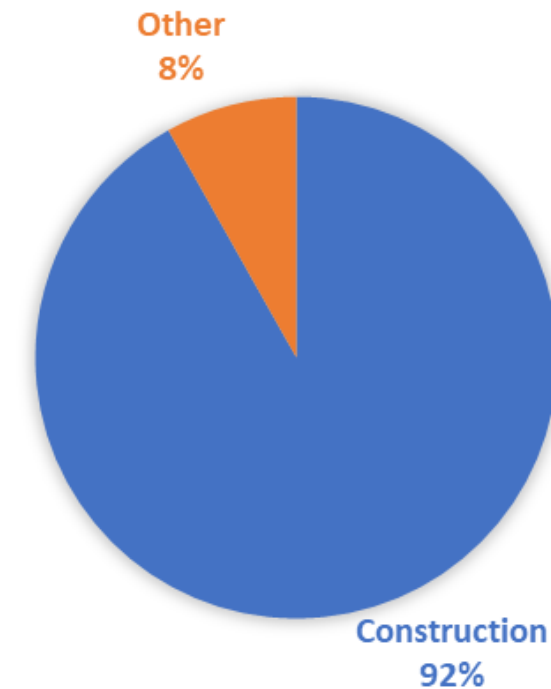
RACE



VETERAN STATUS

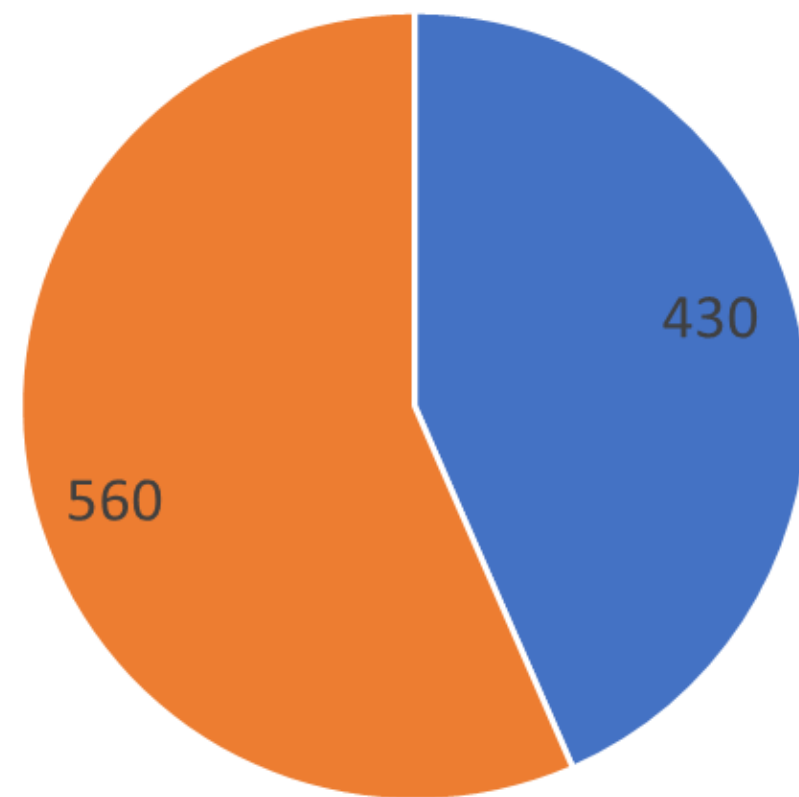


SECTOR



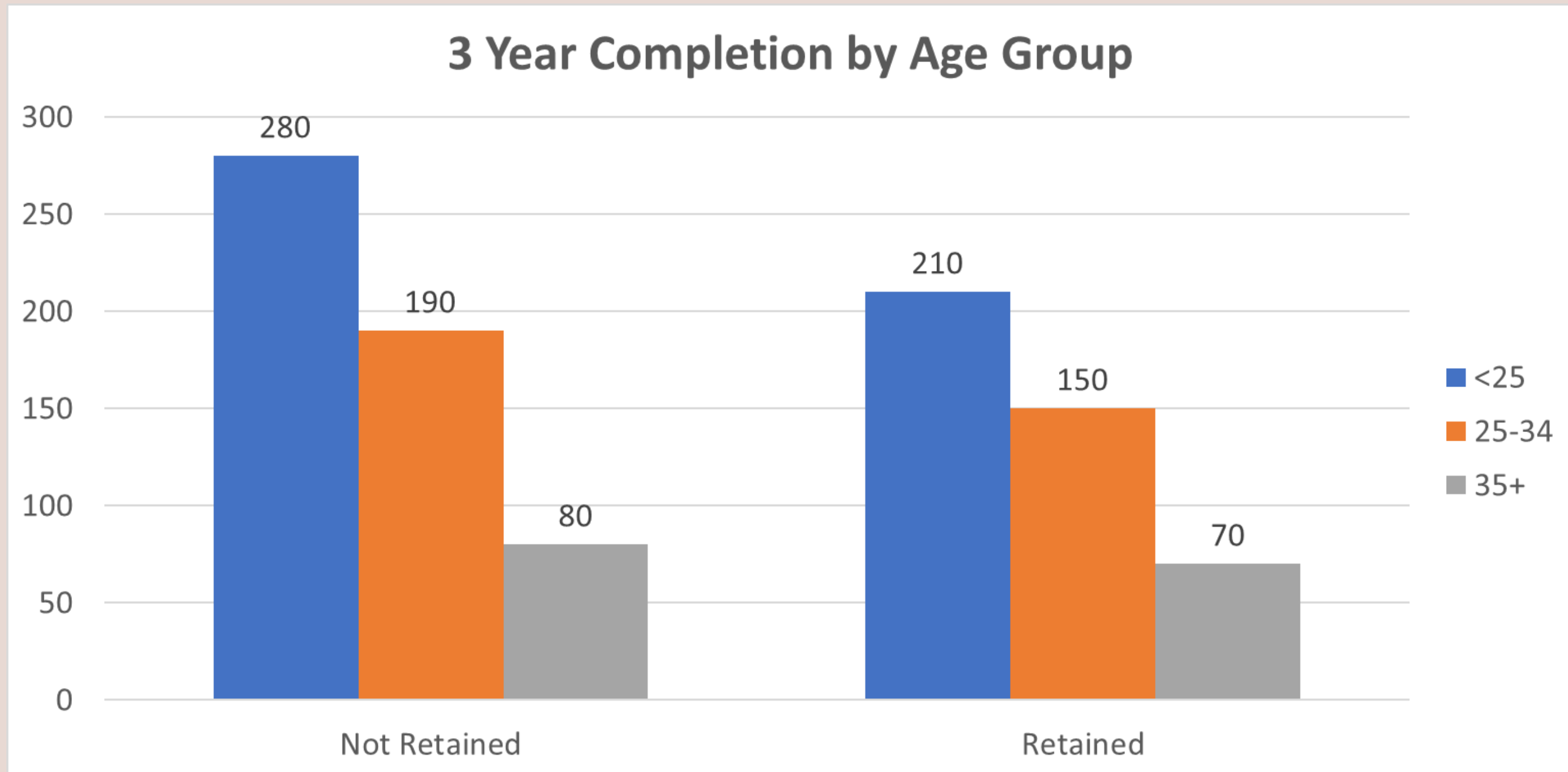
WHAT ARE THE RETENTION OUTCOMES?

3 Year Retention for Entire Cohort

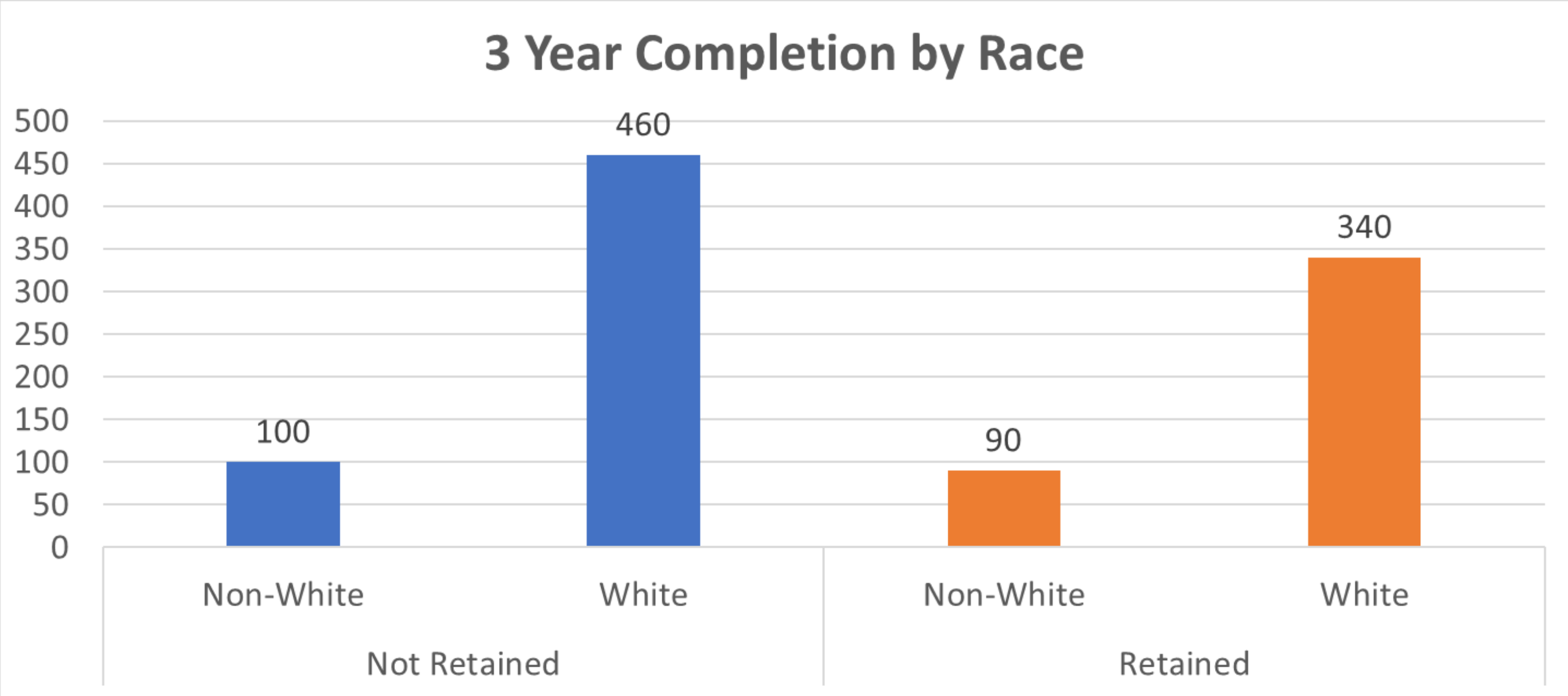


■ Retained ■ Not-Retained

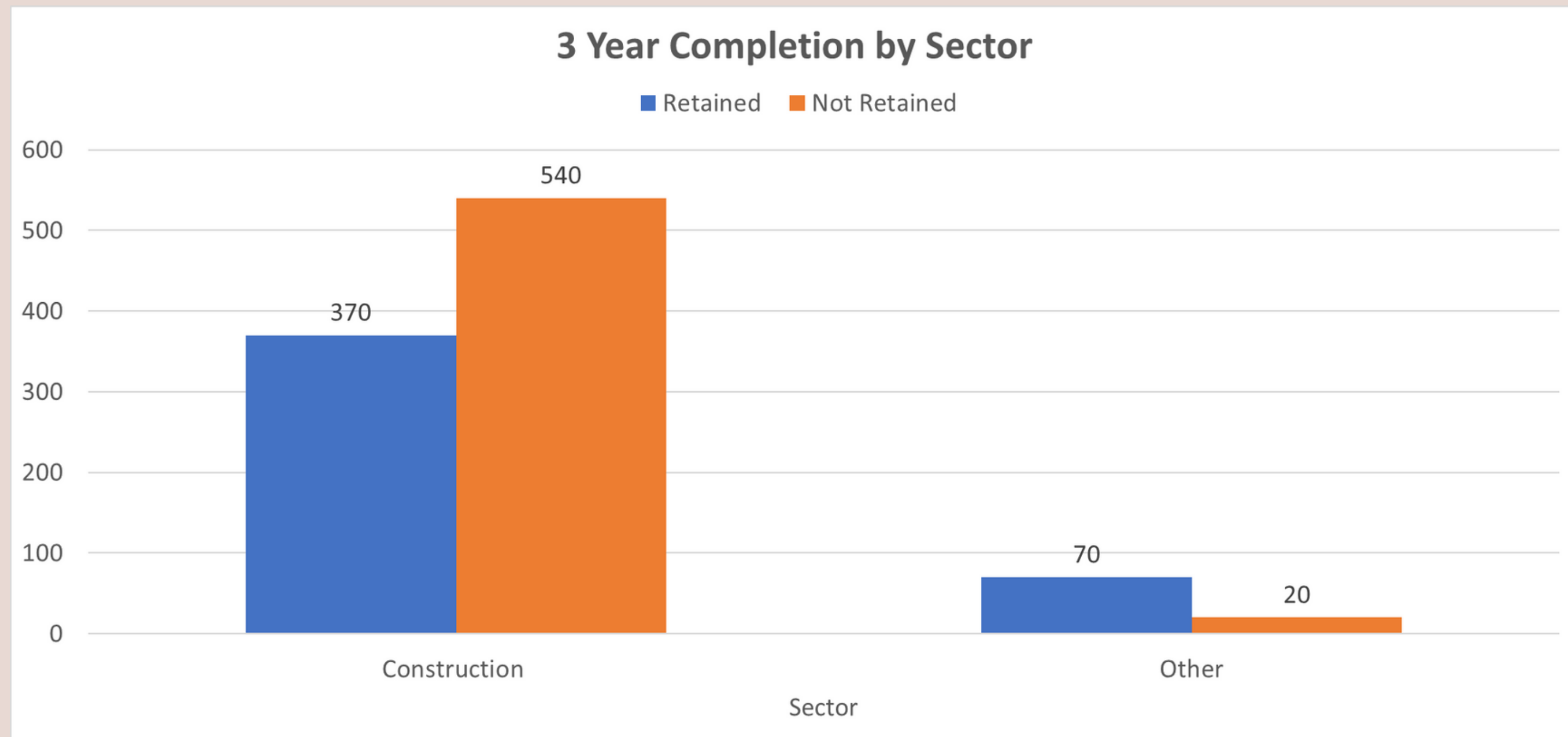
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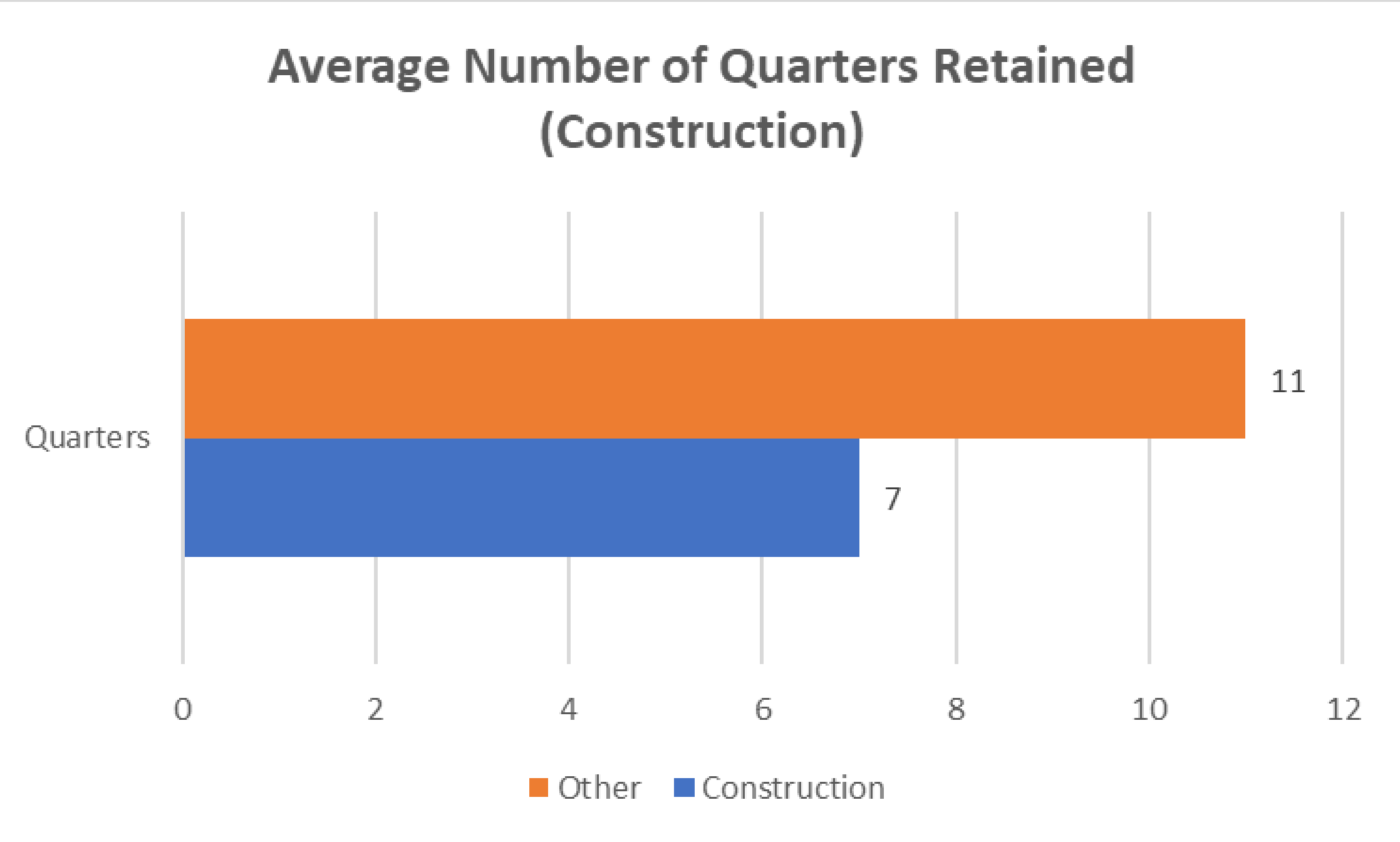
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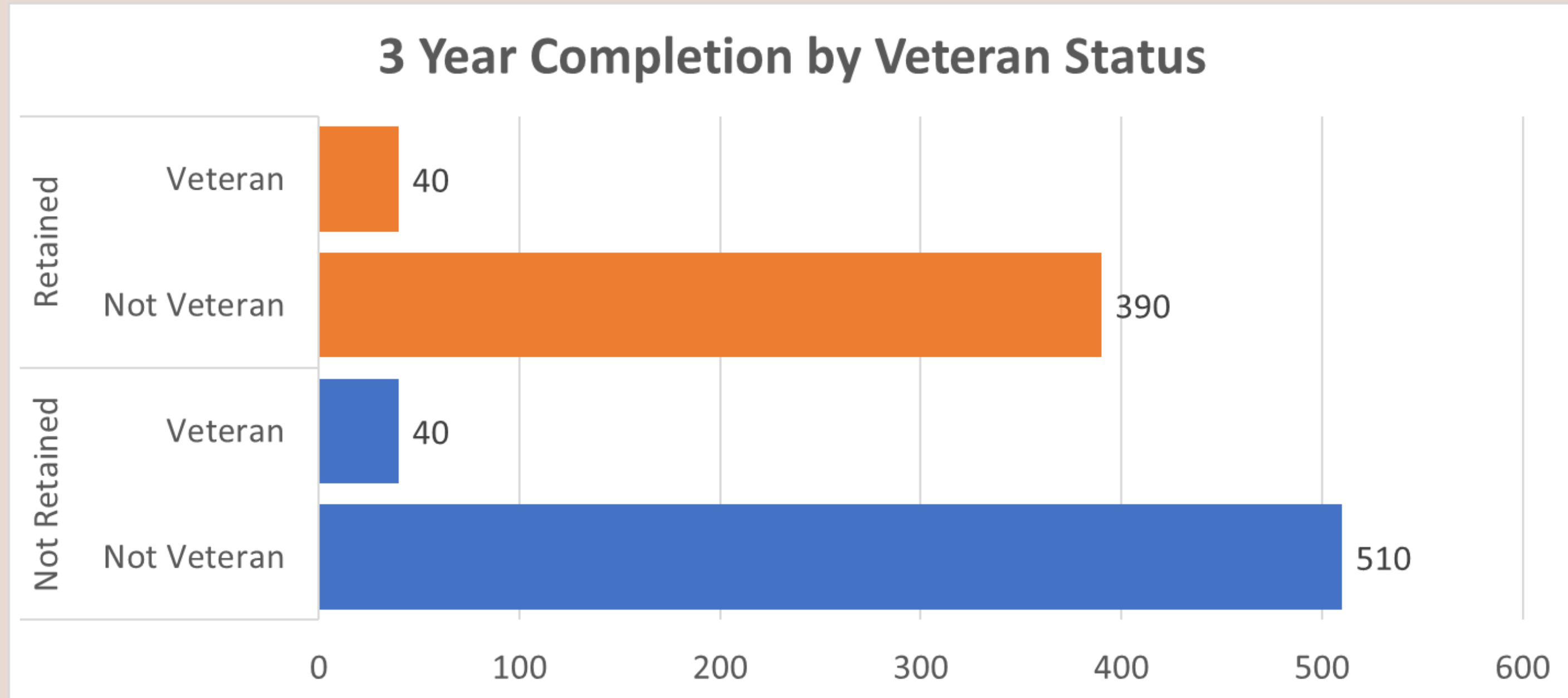
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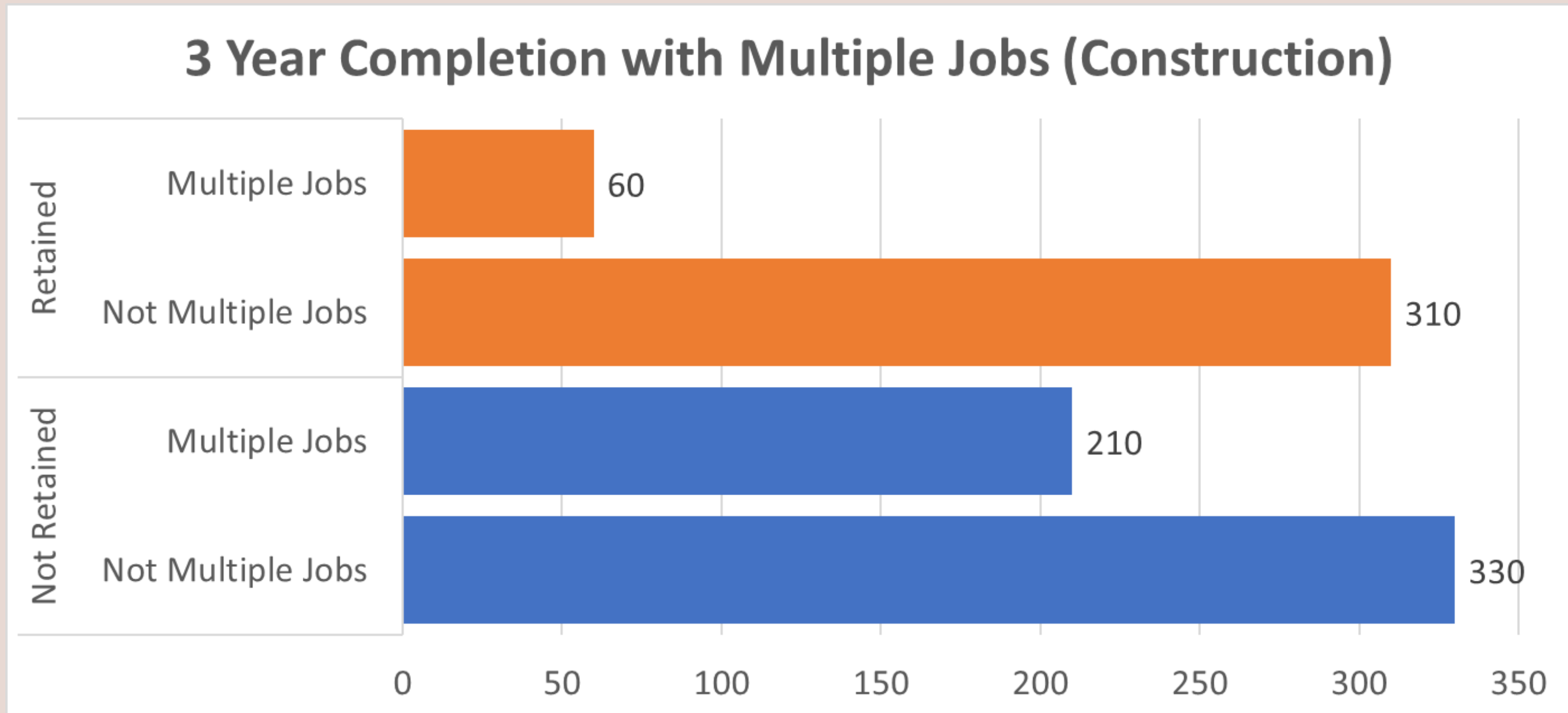
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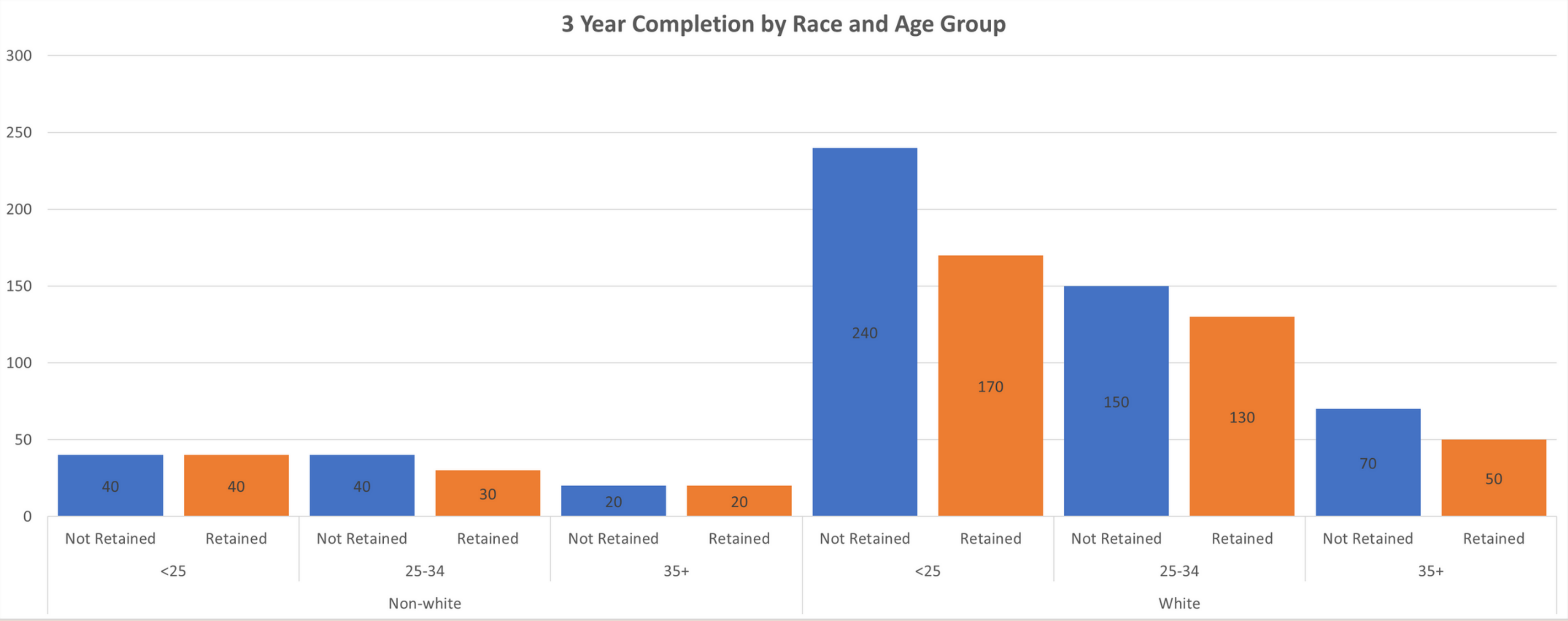
INTERESTING OUTCOMES & PATTERNS



INTERESTING OUTCOMES & PATTERNS



INTERESTING OUTCOMES & PATTERNS



CAVEATS

1.

DATA GAPS

UI Wage data does not cover all types of employment.

2.

PANDEMIC IMPACT

2017-2018 completers may have left employers due to pandemic during measured retention period.

4.

TIMEFRAME

Apprentices started, completed, or left at different times within the quarter.

3.

WORK SITES

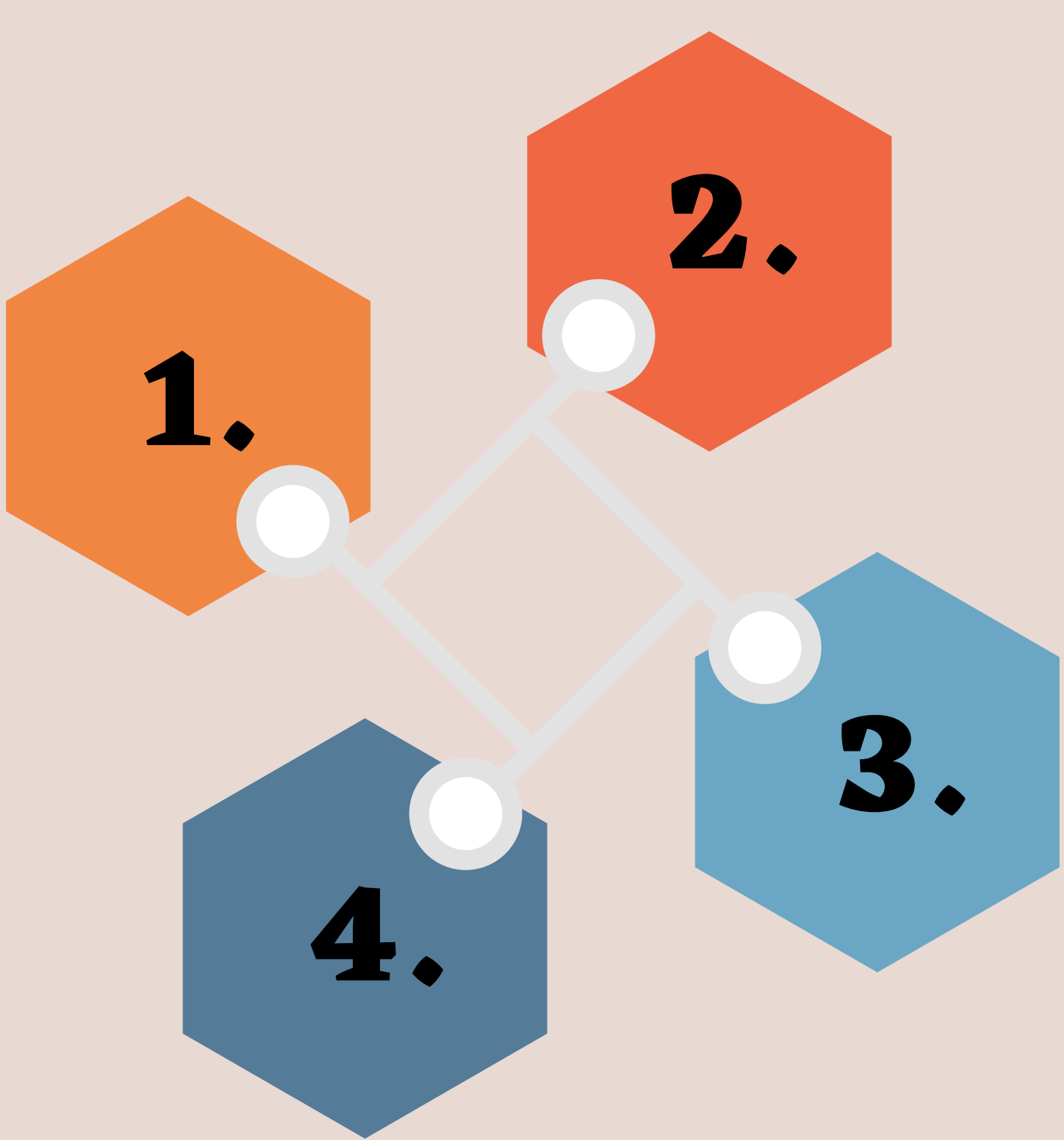
Some Employers have multiple work sites.

1.

2.

3.

4.



NEXT STEPS

GENDER ANALYSIS

Gender data wasn't large enough for us to extract. Future analysis could tell us if there are sectors with a growing number of females participating

Size of Employer, If Apprentice changed Employer or Industry during RAP, Length of RAP, If RAP was suspended, Education level, Activity prior to RAP

ADDITIONAL SUBGROUP ANALYSIS

NEW COHORT ANALYSIS

Non Registered Apprenticeship Participants, Non-completers

Compare retention outcomes across different locations, sizes of employers. Can even help group completers based on outcome data.

CLUSTER ANALYSIS

REFERENCES

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THANK YOU!
QUESTIONS?